

Remarks

Receipt is acknowledged of the Office Action mailed July 25, 2005. Applicant respectfully requests reconsideration of the present application in view of the foregoing amendment, and the remarks which follow. No new matter is added with the amendments, which are fully supported by the specification.

Claim 1 has been amended. Claims 1 and 2 are pending in the application.

Applicants wish to express their appreciation to the Examiner for the acknowledgement of the filed priority papers which have been placed of record in the file.

Claim Rejections under 35 USC § 103

Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,759,263 to Ying ("Ying") in view of U.S. Patent No. 6,452,764 to Abraham et al. ("Abraham") in further view of Wolf, *Silicon Processing for the VLSI Era*, Vol. 4, Lattice Press (2002) ("Wolf"). Claim 1, as amended now recites "subjecting the exposed portion of the free magnetic layer to a halo ion implant process to convert the state of the exposed portion into an amorphous state." As indicated by the Examiner, Ying fails to "disclose subjecting the exposed portion of the free magnetic layer to a halo implant process." The Examiner relies on Abraham to cure this deficiency in Ying. However, Abraham fails to disclose "subjecting the exposed portion of the free magnetic layer to a halo ion implant process *to convert the state of the exposed portion into an amorphous state.*" (emphasis added). Rather, Abraham discloses "Another insulating layer to form tunneling region 522' is then deposited (or alternatively the Al is only partially oxidized for form the tunneling region 522'), over which the magnetically free region 524' is deposited. A protective mask 500 is defined over the structure. Oxygen ions (O₂) 501' are then ion-implanted into the structure, and an anneal step results in regions 530₁' and 530₂', formerly aluminum, being converted to insulating Al₂O₃ regions." Col. 10, ll. 3-11. Thus, Abraham fails to disclose converting the exposed portion into an amorphous state and fails to cure the deficiency of Ying.

Moreover, the Examiner states that Wolf discloses a method of halo implantation for a self-aligned MOS structure. However, nothing in Wolf cures the deficiencies of both Ying and Abraham to render amended claim 1 obvious. Accordingly, Applicants believe the claim is now in condition for allowance. Applicants respectfully request the Examiner to withdraw the rejection of claim 1 and issue the amended claim as allowed.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Ying in view of Abraham in further view of Wolf and in further view of U.S. Patent No. 6,083,794 to Hook et al. ("Hook"). Claim 2 depends from independent claim 1 and as such incorporates all the limitations of claim 1. Applicants respectfully submit that Hook fails to cure the deficiencies of Ying, Abraham, and Wolf as stated above.

Consequently, claim 2, by virtue of its dependence on claim 1, is believed to be allowable for at least the aforementioned reasons and withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested..

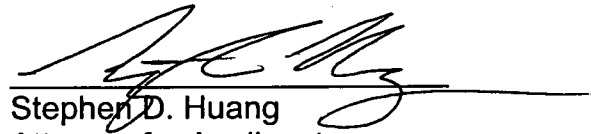
CONCLUSION

In view of the above amendment and remarks, applicants respectfully request that all objections and rejections be withdrawn and that a notice of allowance be forthcoming. The Examiner is invited to contact the undersigned attorney for applicants at 202-912-2160 for any reason related to the advancement of this case.

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Respectfully submitted,



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